

SUBMISSION TO ENTER THE
U.S. NATIONAL PHASE
UNDER 35 U.S.C. 371

EXPRESS MAIL LABEL

No. EV755681789US

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 August 2005 (18.08.2005)

PCT

(10) International Publication Number
WO 2005/076667 A1

(51) International Patent Classification⁷: **H05B 3/74**

(21) International Application Number:
PCT/GB2005/000368

(22) International Filing Date: 2 February 2005 (02.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0402412.1 4 February 2004 (04.02.2004) GB

(71) Applicant (for all designated States except US): CERA-
MASPEED LIMITED [GB/GB]; Zortech Avenue, Kid-
derminster, Worcestershire DY11 7DY (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ALVES, Brian,

Roger [GB/GB]; Haseley, Evendine Lane, Malvern,
Worcestershire WR13 6DY (GB). LAMB, Stuart
[GB/GB]; 42 Hunt End Lane, Redditch, Worcestershire
B97 5UW (GB).

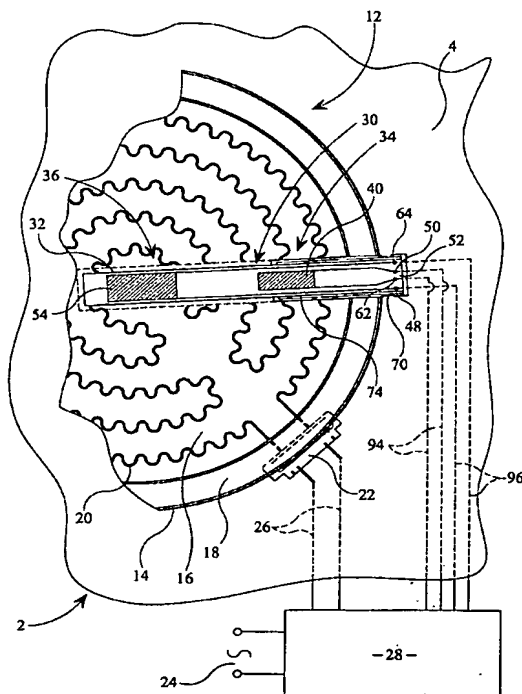
(74) Agent: JACKSON, Derek, Charles; The Old Yard,
Lower Town, Worcester, Worcestershire WR3 7RY (GB).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: ELECTRICAL HEATING ARRANGEMENT



(57) Abstract: A temperature sensor assembly (30) is provided for an electrical heating arrangement (2). The temperature sensor assembly (30) includes a substrate (32) located in a heater (12). The substrate (32) has an upper surface (38) in contact with the lower surface (10) of a cooking plate (4). The upper and/or lower surface or surfaces (38, 66) of the substrate (32) is provided with a first temperature-sensitive resistance element (40) at a first region (42) of the substrate (32) proximate a peripheral region (34) of the heater. The upper (38) and/or lower (66) surface or surfaces of the substrate (32) is or are provided with a second temperature-sensitive resistance element (54; 54A; 54B) at a second region (56) of the substrate (32) proximate the central region (36) of the heater. A support member (70; 102) is secured to the substrate (32) and underlies at least the first region (42) of the substrate (32) and thermal insulation means (74) is interposed between the lower surface (66) of the substrate (32) and the support member (70) only at the first region (42) of the substrate (32).

WO 2005/076667 A1



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.